

Connecting the DOTs

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Former Secretary Darin Bergquist – 2021 Transportation Hall of Honor Inductee

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The Transportation Hall of Honor recognizes those who have made a lasting, valuable, or unique contribution to South Dakota's air, highway, public transit, or rail transportation system. The Hall of Honor originated in 1972 and Bergquist will be the 95th inductee.

Bergquist worked for the SDDOT for 22 years, serving 13 years as Transportation Secretary for three different governors.

A banquet to honor former Secretary Bergquist will be announced at a later date.

SDDOT Mission: To efficiently provide a safe and effective public transportation system

SDDOT Vision: Better lives through better transportation by being the best





The Secretary's Corner

Hands-On Recruitment Through SDDOT Experiences

I am so appreciative of our SDDOT employees who go above and beyond to provide valuable experiences to our potential future employees. A shining example of hands-on recruitment was the experience offered to interns from the Custer and Rapid City Areas earlier this summer.

Custer Area Project Engineer Matt "Rip" Rippentrop collaborated with other members of the SDDOT to line up a Pierre-based tour to coincide with drilled shaft construction on the Pierre-Fort Pierre bridge replacement project. Steve Palmer, Rapid City Area Engineering Supervisor served as the tour guide for the interns' visit. Dan Vockrodt, Pierre Area Engineering Supervisor, provided a look behind-the-scene tour of the Pierre/Ft. Pierre bridge replacement project.

Hadly Eisenbeisz, Bridge Construction Engineer, guided the interns through the Central Office and Shea Lemmel, Bituminous Engineer, led a tour through the Central Lab.

I want to personally thank Matt "Rip" Rippentrop, Steve Palmer, and everyone on site in Pierre who gave their time and shared expertise with our visiting interns.

Thank you to everyone throughout our organization who works hard to provide valuable experiences, foster relationships, and build excitement around public service for our interns and seasonal employees each year.



Interns Louis Ratcliffe (far left) and Thomas Massa (far right) join Pierre Area Engineering Supervisor, Dan Vockrodt at the Pierre/Fort Pierre bridge replacement project.

Rapid City Area interns who participated, but not pictured, were Sydney Ferrie and Gabriel Munoz.

Fallen Hero Bridge Naming Program Dedication Photos

The Fallen Hero Program was created to honor and remember South Dakota's fallen veterans by naming bridges on the state highway system for those who were either killed or are still missing in action while defending our country in an armed conflict.

Naming bridges in honor of our combat veterans is an initiative of Governor Noem and the Departments of Military, Transportation, and Veterans Affairs.

Photos from recent dedication ceremonies and sign placement on bridges.











Dream, Dare, Do By Kellie Beck and John Villbrandt



If you want something Dream, Dare, Do....

If you say those words out loud and really take the meaning to heart you will begin to make a positive change in your life and/or someone else's life.

Mentoring is an activity that can help you begin to make that change. Mentoring can build your skills as both a mentor and mentee. You never know what you will learn or how you will contribute to someone's life through your participation in mentoring. The change could come in a professional setting or a personal setting. Either way, you can and will impact someone when you form a mentoring partnership. And as an added bonus, that partnership will have a positive impact on you as well.

The video clip below tells a story of a gal who mentored two very different folks and how she learned a powerful lesson about herself and how to interact with others. Please consider taking the time to either become a mentor or participate in DOT's mentoring program. The value you will get out of this program is well worth it.

Dream - Dare - Do -

https://www.ted.com/talks/shirley_liu_why_the_power_of_mentoring_can_change_the_world

Intranet Additions:

Find the weekly Lobby TV presentations on the Intranet home page in the **DOT Crossroads** section.

To help provide easy-access to information, data, and links included in my **Information Interchange** emails, a weekly summary is also available on the Intranet home page.

https://intranetdot.sd.gov/



SDDOT Logos and Templates:

https://www.dot.sd.gov/inside-sddot/media/branding-and-identity-guidelines

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SDDOT Brings Innovation to the Forefront with ITS Team

As of July 1, 2021, the SDDOT has a team devoted to the innovations that keep South Dakota's transportation system on the cutting edge of safety. Pat Brueggeman and Dave Huft are the first two members of the Intelligent Transportation Systems (ITS) team, a small group who will focus on ITS full-time.

The SDDOT has a long history with ITS, dating back to 1996 when the SDDOT and North Dakota Department of Transportation worked together to create the first statewide traveler information system in the United States. Since then, the SDDOT has continued to put innovation at the forefront of everything we do. The new ITS Program pushes that commitment one step further.

The folks from ITS played significant roles in major projects before they officially became their own program. One example is the technology deployed at the Valley Springs Port of Entry on Interstate 90 near the Minnesota border. The SDDOT installed an electronic screening system that identifies and weighs trucks and checks their tire inflation at Interstate highway speeds. As trucks approach the port of entry, the system verifies vehicle registration, fuel tax status, and motor carrier safety scores. Screening commercial vehicles allows trucks in good standing to bypass the port 95 percent of the time. Haulers save at least \$2.50 per minute of avoided delay, while port of entry staff can concentrate their attention on higher risk carriers.

Another example is the statewide network of nearly 100 environmental sensor stations that provide weather information and roadway images to SDDOT's maintenance workers, enabling them to assess road conditions with less travel to remote locations. The same information is fed to travelers through the SD511 phone system, website, and mobile apps so they can plan and make their travel more safely.

The ITS team has exciting projects on the horizon. Beginning in 2022 they will establish South Dakota's first variable speed limit zones, which will rely on sensors that detect temperature, wind, visibility, pavement conditions, and traffic to recommend a speed limit consistent with conditions. The speed limit will display on digital speed limit signs. The SDDOT received a \$1 million grant from the federal government to create these speed limit zones on I-29 near Brookings next year and I-90 near Sturgis in 2023 - 2024.

"The foundation of ITS is using information and communications to build a safer and more efficient transportation system," says Dave Huft, the new ITS Program Manager. The ITS team will work to implement technologies such as traffic sensors, variable speed limit signs, weigh-in-motion sensors, dynamic message boards, and other solutions that reduce travel times and create a safer driving environment for South Dakotans.

The ITS team will be an valuable asset to the SDDOT, and we can't wait to see what innovative solutions they implement next!



ArcGIS Tips and Tricks Mobile Data Collection

By Kimberly Zerr and Kathryn Wesson

Mobile GIS applications make collecting data in the field easier than ever with the new Field Maps application and enhancements to Survey123. If you're still using paper maps and forms in the field, or if you want to improve your current GIS data collection, keep reading.

Field Maps is the latest version of Collector for ArcGIS. It's a map-based application for field data collection on iOS, Android, and Windows 10 devices. Data that is collected can be viewed in ArcMap, on a web map, or in another web application. The new features of Field Maps allow users to download multiple areas for collection in areas without cell service, add markups to the map with notes for later review, and share a map and/or markups with other users. Field Maps also has a new smart form feature that works within a map. The smart form will allow the GIS team to create a group of questions with a name and description, create conditional visibility so the people in the field only see information that is relevant to them, and create required fields that warn field workers if their answer doesn't meet requirements.

Survey123 is a form-centric application that lets users capture data, photos, and locations in the field. Survey123 works with iOS, Android, and Windows 10 (just like Field Maps), but it also works in a browser from a desktop, tablet, or smartphone. The surveys in this app contain predefined questions and logic to help you fill in answers and can be designed as an XLSForm. Form data that is gathered can be viewed in ArcMap, a web map, or a web application just like data from Field Maps.

Having trouble deciding which app is right for you? While Survey123 lacks the map integration that you find in Field Maps, the XLSForm language that it uses has slightly better capabilities for building in more logic and calculations that aren't available in Field Maps smart forms. A survey made with Survey123 can also be viewed in a browser, whereas Field Maps must be accessed through its app. Also, you do not need an account to access a survey from Survey123. All you need is the URL of the survey, which can be pasted into a browser and opened on the web or in the app (depending on the survey settings).

The GIS team is working with several offices on developing forms and applications, as well as improving existing GIS mobile applications. If you want to learn more, please come talk to us!



Stainless Steel Bridge Deck Reinforcing

By Steve Johnson, Chief Bridge Engineer

In an effort to increase the service life of reinforced concrete bridge decks, the Office of Bridge Design has transitioned from epoxy coated reinforcing steel to stainless steel reinforcing in all new concrete decks on the state highway system. We've used stainless reinforcement on several higher traffic volume bridge decks in recent years, and based on that success are expanding its' use.

The stainless steel reinforcing protects bridge decks from the harmful effects of deicing chemicals (deicing chemicals cause corrosion in the resteel). As the resteel corrodes, it expands, fracturing the concrete surrounding the reinforcing. The SDDOT began using epoxy coated reinforcing in concrete bridge decks in the late 1970's. However, recent bridge deck inspections and rehabilitation work revealed corrosion in epoxy coated reinforcing ultimately leading to deterioration of bridge deck concrete.

Life-Cycle Cost Analysis:

Using stainless steel reinforcing over epoxy coated reinforcing in bridge decks is anticipated to increase structure costs approximately eight percent. However, a recent life-cycle cost analysis of stainless steel deck reinforcing versus epoxy coated deck reinforcing showed a life cycle cost savings of approximately 29 percent per structure.

In addition to the life cycle cost savings, the use of stainless steel is expected to reduce the amount of repair and rehabilitation work (chip seals, deck overlays, and deck replacements) required on our structures. This will greatly reduce inconvenience to the traveling public.

Photos below demonstrate a rusted epoxy coated reinforcing on the left, and a stainless steel deck example on the right.





Strategic Objective: Value all Team Members

New Hires:

Michael Hauptman-Magee, Engineer I - Pierre
Wesley Jaton, Highway Maintenance Worker - Redfield
Taylor Droz, Highway Maintenance Worker - Miller
Joshua Blood, CAD Technician - Pierre
Hayden Pigors, Highway Maintenance Worker - Britton
Daniel Cooper, CAD Technician - Rapid City
Matthew Bossert, Journey Transportation Technician - Winner
Amy Mancuso, Federal Funding Specialist - Pierre
Rebecka Wallingford, Accountant/Auditor II - Pierre
Gabriel Ellendorf, Highway Maintenance Worker - Murdo
Austin Kusler, Highway Maintenance Worker - Custer



Lateral Transfers:

Doug Gorham, Region Operations Coordinator - Pierre William Taylor, Highway Maintenance Worker - Aberdeen Justin (Sid) Green, Highway Maintenance Worker - Pierre

Promotions:

Shea Lemmel, Bituminous Engineer - Pierre Ryan Story, Project Technician - Sioux Falls Ryan Schimke, Lead Highway Maintenance Worker - Rapid City Derek Ferwerda, Transportation Engineering Manager - Pierre

July Longevity:

Steve Palmer, Project Engineer Supervisor – 25 years (Rapid City Region) Alan Berheim, Finals Review Specialist – 20 years (Central Office) John Matthesen, Area Engineer – 30 years (Belle Fourche Area)

In Manager

In Memory:

SDDOT Retiree, Kevin Muilenburg, passed away on June 15 due to complications from ALS.

He was a retiree from the Sioux Falls Area where he worked in maintenance and as a snowplow operator.





SDSU Presenting the Distinguished Engineer Award to Lawrence "Larry" Weiss

Larry was a long-time DOT employee. He started with the SDDOT as an Assistant Engineer in 1965. Larry worked with the SDDOT for nearly 37 years and has provided over 46 years of service to the state of South Dakota. The ceremony will be on Thurs., August 26 at the Woster Celebration Hall at the Jerome J. Lohr Foundation building at SDSU.





Remedy & Kelsey Morrison, granddaughters of **Jim Lolley-Unit 391 Highway Maintenance Supervisor**, helped the Lady White River golf team to a 5th place finish at the state golf tournament.

Remedy received Academic All-State honors while Kelsey placed 10th overall.



Gregg Ulmer (Unit 392 Highway Maintenance Supervisor in Winner) and his wife, Shawn, became grandparents again on May 27, 2021.

Islabelle Mae was 19 ½" long & weighed 6 lbs. 15 oz

Alan Ray was 19" long & weighed 6 lbs. 10 oz.



Sutton Gene Fitzke was born on June 2, 2021.
Sutton is the son of **Tanner Fitzke**, **Surfacing Plans Engineer Manager (Pierre)**.

Brad Whitley, Highway Maintenance Worker (Winner), and his wife Mary, became grandparents for the first time! Welcome Traelyn Russell Teter!





Tyler Green, Equipment Management Specialist (Pierre) welcomed a new granddaughter on July 1, 2021. Paislee Jo Green, was born to Tyler's son and daughter-in-law, Clayton (Pierre Police Dept.) and Kaylee (SD Dept. of Revenue)



Dail B. Mollard, Labor Law Compliance Officer, (Pierre) caught this black catfish at the face of the dam recently.



Greg Aalberg, Sioux Falls Area Engineering Manager, is pictured with his grandson, Brayden.

This 3-year-old is getting really interested in fishing!

(And looks like he is doing great at it!)



Exit 32 in Sturgis as viewed from the east off the Centennial Trail. **Tom Horan, Rapid City Area Operations Engineer** snapped this photo about 48 miles into a 53-mile foot race. The sunlight shining off the road and the background clouds really caught my attention.

A picture of the Oahe Damn on July 4th! By **Jim Hyde**, **Pierre Region Operations Engineer**





Doug Kinniburgh, Engineering Manager for the Office of Local Government Assistance (Pierre) presented Wade Dahl his 30-year pin and plaque at the County Highway Summer Event. Wade is an engineer in the LGA office.



Huron Area Highway Maintenance Supervisor, Mike Hieb gives Justin Purintun his 20 year pin. Justin is a Huron Area Highway Maintenance Worker.



Stacy Parmely Accountant/Auditor (right) receives her 20-year pin from **Accounting Manager, Patti Devitt**.



Beau Rothschadl was awarded a \$1,000 WASHTO Scholarship through the SDDOT. Beau is a Tabor, South Dakota native majoring in civil engineering at SDSU. He has interned with the SDDOT for two summers. He plans to pursue a master's degree in transportation engineering upon earning his undergraduate degree. Beau is the son of Greg Rothschadl, Yankton Area Project Engineering Supervisor.





Danae Berman, Purchasing Specialist (Pierre), her daughter Raya, and boyfriend Chris Dean hiked to the top of Crow Peak in Spearfish.



Replacing approach slabs on a bridge near Edgemont - the tallest bridge in the state!

Photo submitted by **Peyton Weyer, Custer Area Journey Transportation Technician.**



Photos submitted by **Mobridge Area Engineer, Steven Jacobs**:

- Mobridge Tigers learning how we survey (pictured right).
- Eric Stroeder, Project Engineering Supervisor, staking (bottom left)
- **Drew Rudebusch**, Survey Crew Chief, and a Mobridge Area Intern surveying (bottom middle).
- A.G.E. damming the Grand River at Little Eagle (bottom right).













277 Unit in Flandreau working under I-29 repairing clogged culverts. **Josh Weber** running the backhoe



Chad Urban running the jetter and Dan Trost standing by the culvert end. Photos submitted by Steve Schneider, Highway Maintenance Supervisor for Flandreau/ Madison 272 and William Burshiem, Lead Highway Maintenance Worker for Flandreau 277.



SDDOT Mitchell Campus New Gas Tanks
Photo submitted by Jesse Parker, Region Traffic Design
Engineer - Mitchell Region Operations.

Larry Andersen, Lead Highway Maintenance Worker, working on Highway 34.

Photo submitted by **Luke Neville**, **Lead Highway Maintenance** - **Pierre Area**.



I-29 paving project near exit 232 (Sisseton)
Photo submitted by **Jeff Brink**, **Watertown Area Engineering Supervisor**.











Tanner Knutson, Highway Maintenance Worker, running the water truck on an asphalt repair project on S.D. Highway 19A in the Yankton Area.

Stacy Rasmussen, Highway Maintenance Worker, driving a loader on an asphalt repair project on S.D. Highway 11 in the Yankton Area.

John Sackett, Highway Maintenance Worker, running a roller on an asphalt repair project on S.D. Highway 11 in the Yankton Area.

Selby Highway Maintenance Worker, Jesse Gosch and his wife Kiley celebrated their four year wedding anniversary. They are pictured by their wedding tree they planted the day after they got married.

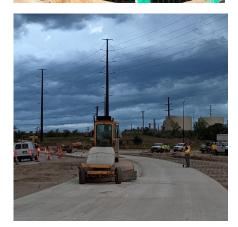
Gene Ericson, Highway Maintenance Worker from Junction City shown here flagging on S.D. Highway 11 in the Yankton Area.



John Koch & John Mehlhaff celebrated their retirements with a huge cake on June 8th. Thank you for the years of dedicated service John and John!



Folks from the **Pierre Region Materials Lab** suited up to go down one of the drilled shafts on the Pierre/Fort Pierre Bridge project to obtain core samples of concrete. Photo submitted by **Melody Maeschen**, **Accounting Assistant**.



A thunderstorm begins to brew before a pavement pour on Omaha Street in **Rapid City**. Photo submitted by **Jana Morris**, **Project Technician**.



Brian McPhail and Pete Costello of the Mitchell Region
Sign Crew replace outdated signage
on I-229 in Sioux Falls.
Photo Submitted by Keith Lunstra, Lead Highway
Maintenance Worker.



Jesse Gosch, Selby Highway Maintenance Worker, submitted this photo of the crew in the paving process on S.D. Highway 271



Dale Kunkel, Highway Maintenance Worker in Plankinton fixing fence. Photo submitted by Ken Payne, Highway Maintenance Supervisor.



Steve Schneider, Chad Urban, Chris Voelker, Matt Wochnick, William Burshiem, and Josh Weber all work together on an asphalt grind project.



Mike Will and crew on top of 11ft. x 10 ft. pre cast box culverts on Highway 15 Project.

Photo submitted by **Mike Will, Watertown Area**

Photo submitted by Mike Will, Watertown Area

Project Engineer.



An asphalt overlay project on U.S. Highway
12 east of Milbank. Photo submitted **Jon Liebe, Highway Maintenance Worker.**

